

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE <b>J</b>		PAGE OF PAGES <b>1</b>   <b>67</b>	
2. AMENDMENT/MODIFICATION NO. <b>0001</b>		3. EFFECTIVE DATE <b>01-Jun-2005</b>		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO.(If applicable)	
6. ISSUED BY CONTRACTING DIVISION USACE, LITTLE ROCK (W9127S) 700 W. CAPITOL AVE, RM 7018 LITTLE ROCK AR 72201-3225		CODE <b>W9127S</b>		7. ADMINISTERED BY (If other than item 6)  <b>See Item 6</b>		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				<input checked="" type="checkbox"/> 9A. AMENDMENT OF SOLICITATION NO. <b>W9127S-05-R-0012</b>			
				<input checked="" type="checkbox"/> 9B. DATED (SEE ITEM 11) <b>19-May-2005</b>			
				10A. MOD. OF CONTRACT/ORDER NO.			
				10B. DATED (SEE ITEM 13)			
CODE		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.</b> <b>IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) <b>REHAB AND PAINT TAINTER GATES AND STOPLOGS, LOCK AND DAM #5</b>  The solicitation is amended to make the following changes:  The date and time for the site visit is changed to 7 June 2005, 10:00 a.m.							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				TEL: _____ EMAIL: _____			
15B. CONTRACTOR/OFFEROR  _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA  BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED	

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES**AMENDMENT 0001**BID SCHEDULE**

Replace BID SCHEDULE with revised BID SCHEDULE, Encl 1.

**SECTION 00600**

1. The following attachments were omitted from the solicitation and must be returned with the cost proposal:

Enclosures, Encl 2

Bid Bond (SF 24)

Previous Contract History

Financial Information

Disclosure of Lobbying Activities (SF LLL)

Sample Subcontracting Plan

**TECHNICAL PROVISIONS**

1. Replace SECTION 01270 with revised SECTION 01270, Encl 3.
2. Replace SECTION 01330 with revised SECTION 01330, Encl 4.
3. Replace SUBMITTAL REGISTER with revised SUBMITTAL REGISTER, Encl 5.
4. Replace SECTION 01451 with revised SECTION 01451, Encl 6.
5. Replace SECTION 01510 with revised SECTION 01510, Encl 7.
6. Replace Attachment to SECTION 01510 with revised Attachment to SECTION 01510, Encl 8.
7. Replace SECTION 01540 with revised SECTION 01540, Encl 9.
8. Replace SECTION 05090 with revised SECTION 05090, Encl 10.
9. Replace SECTION 05500 with revised SECTION 05500, Encl 11.

Solicitation No. W9127S-05-R-0012

Amend 0001, Encl 1

**SECTION B**  
**BIDDING SCHEDULE**  
 (To be attached to SF 1442)A

Item No.	Description	Estimated Quantity	Unit	Unit Price	Amount
	<b>BASE BID Gates 1, 2 &amp; 3</b>				
0001	Mobilization	Lump	Sum	\$_____	\$_____
0002	Replacement of Structural Steel Members				
0002A	First 22 Members	22	EA	\$_____	\$_____
0002B	Over 22 Members	5	EA	\$_____	\$_____
0003	Replacement of Structural Tee on Skin Plate				
0003A	First 45 Sections	45	EA	\$_____	\$_____
0003B	Over 45 Sections	22	EA	\$_____	\$_____
0004	Heat and Straighten Structural Steel Members				
0004A	First 9 Members	9	EA	\$_____	\$_____
0004B	Over 9 Members	8	EA	\$_____	\$_____
0005	Grinding of Members				
0005A	First 150 Linear Feet	150	Linear Foot	\$_____	\$_____
0005B	Over 150 Linear Feet	20	Linear Foot	\$_____	\$_____
0006	Miscellaneous Welding				
0006A	First 80 Hours	80	Hours	\$_____	\$_____
0006B	Over 80 Hours	8	Hours	\$_____	\$_____
0007	Blast Cleaning and Painting 3 Tainter Gates	Lump	Sum	XXX	\$_____
0008	Blast Cleaning and Applying 3 Coats of Coal Tar Epoxy Paint to 6 Gate Hitch Blocks	Lump	Sum	XXX	\$_____
0009	Stop Log Installation and Removal				
Amend 0001 0009A	First 3 Bays	3	Each	\$_____	\$_____
0009B	Over 3 Bays	1	Each	\$_____	\$_____
0010	Removal, Preparation, Furnish, Installation and Adjustment of Side Seal Assemblies on 3 Tainter Gates	Lump	Sum	XXX	\$_____
0011	Replacement of 7.5 lb. Anodes	87	EA	XXX	\$_____

0012	Replacement of 44 lb. Anodes	90	EA	XXX	\$_____
0013	Replacing Grease Fittings and Regreasing 6 Hitch Blocks	Lump	Sum	XXX	\$_____
	<b>TOTAL BID PRICE - BASE BID Gates 1, 2 &amp; 3 \$ _____</b>				
	<b><i>OPTION 1</i></b>				
	<b>Balance of Project</b>				
0014	Replacement of Structural Steel Members				
0014A	First 44 Members	44	EA	\$_____	\$_____
0014B	Over 44 Members	15	EA	\$_____	\$_____
0015	Replacement of Structural Tee on Skin Plate				
0015A	First 180 Sections	180	EA	\$_____	\$_____
0015B	Over 180 Sections	88	EA	\$_____	\$_____
0016	Heat and Straighten Structural Steel Members				
0016A	First 32 Members	32	EA	\$_____	\$_____
0016B	Over 32 Members	16	EA	\$_____	\$_____
0017	Grinding of Members				
0017A	First 600 Linear Feet	600	Linear Foot	\$_____	\$_____
0017B	Over 600 Linear Feet	80	Linear Foot	\$_____	\$_____
0018	Miscellaneous Welding				
0018A	First 310 Hours	310	Hours	\$_____	\$_____
0018B	Over 310 Hours	30	Hours	\$_____	\$_____
0019	Blast Cleaning and Painting 12 Tainter Gates	Lump	Sum	XXX	\$_____

Amend 0001

0020	Blast Cleaning and Applying 3 Coats of Coal Tar Epoxy Paint to 24 Gate Hitch Blocks	Lump	Sum	XXX	\$_____
0021	Power-Tool Cleaning and Applying 3 Coats of Paint on Tainter Gate Hoist Platforms	Lump	Sum	XXX	\$_____
0022	Stop Log Installation and Removal				
0022A	First 12 Bays	12	EA	\$_____	\$_____
0022 B	Over 12 Bays	5	EA	\$_____	\$_____
0023	Removal, Preparation, Furnish, Installation and Adjustment of Side Seal Assemblies on 12 Tainter Gates	Lump	Sum	XXX	\$_____
0024	Replacement of 7.5 lb. Anodes	348	EA	XXX	\$_____
0025	Replacement of 44 lb. Anodes	360	EA	XXX	\$_____
0026	Cleaning and Regreasing 30 Gate Hoist Machine Gears	Lump	Sum	XXX	\$_____
0027	Spare Anodes	Lump	Sum	XXX	\$_____
0028	Blast Cleaning and Painting 60-foot stoplogs				
0028A	First 5 60-foot Stoplogs	5	EA	\$_____	\$_____
0028B	Over 5 60-foot Stoplogs	10	EA	\$_____	\$_____
0029	Replacing Grease Fittings and Regreasing 24 Hitch Blocks	Lump	Sum	XXX	\$_____
0030	Demobilization	Lump	Sum	XXX	\$_____
	<b>TOTAL BID PRICE – OPTION 1</b> \$ _____				
	<b>OPTION 2</b>				
0031	Additional Repairs to Cable Hitch Blocks	Lump	Sum	\$_____	\$_____
	<b>TOTAL BID PRICE – OPTION 2</b> \$ _____				

**TOTAL BID PRICE – BASE BID plus OPTION 1 plus OPTION 2** \$ \_\_\_\_\_

<b>BID BOND</b> <i>(See instructions on reverse)</i>	DATE BOND EXECUTED <i>(Must not be later than bid opening date)</i>	OMB NO.:9000-0045
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Public reporting burden for this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVR), Federal Acquisition Policy Division, GSA, Washington, DC 20405.

PRINCIPAL <i>(Legal name and business address)</i>	TYPE OF ORGANIZATION <i>("X" one)</i>	
	<input type="checkbox"/> INDIVIDUAL	<input type="checkbox"/> PARTNERSHIP
	<input type="checkbox"/> JOINT VENTURE	<input type="checkbox"/> CORPORATION
STATE OF INCORPORATION		

SURETY(IES) *(Name and business address)*

PENAL SUM OF BOND					BID IDENTIFICATION	
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NO.
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS	FOR <i>(Construction, Supplies, or Services)</i>	

OBLIGATION:

We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:

The Principal has submitted the bid identified above.

THEREFORE:

The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.

WITNESS:

The Principal and Surety(ies) executed this bond and affixed their seals on the above date.

PRINCIPAL				
SIGNATURE(S)	1.	2.	3.	<i>Corporate Seal</i>
	<i>(Seal)</i>	<i>(Seal)</i>	<i>(Seal)</i>	
NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.	

INDIVIDUAL SURETY(IES)		
SIGNATURE(S)	1.	2.
	<i>(Seal)</i>	<i>(Seal)</i>
NAME(S) <i>(Typed)</i>	1.	2.

CORPORATE SURETY(IES)				
SURETY A	NAME & ADDRESS	STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.	
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	

SURETY B	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) (Typed)	1.	2.		

### INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 20% of the bid price but the amount not to exceed \_\_\_\_\_ dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designed "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.  
  
(b) Where individual sureties are involved, a completed Affidavit of Individual surety (Standard Form 28), for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capability.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

### **PREVIOUS CONTRACT HISTORY**

**Prospective bidders will identify the last five completed contracts, any on-going contracts, and contracts of similar nature as required on this solicitation, both Government and private, performed within the last three years.**

<b>Contract #</b>	<b>Title &amp; Location of Project</b>	<b>Contact Name &amp; Phone #</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Successful bidder/offeror may be requested to provide the Government additional business (credit), technical (work) and financial information.**

**Years in Business**\_\_\_\_\_ **Date Incorporated**\_\_\_\_\_



**(If Applicable)**

## **FINANCIAL INFORMATION**

Contractor's Name \_\_\_\_\_

Solicitation No. \_\_\_\_\_ for \_\_\_\_\_

Request that the following information be completed and submitted with your offer to expedite award in the event you are the low responsive offeror.

### **Banking Information**

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_ Person to Contract \_\_\_\_\_

Checking Acct. No. \_\_\_\_\_ Savings Acct. No. \_\_\_\_\_

### **Credit References**

List name and address of three company credit references you have done business with in order to check your credit rating.

1. \_\_\_\_\_ Telephone No. \_\_\_\_\_

\_\_\_\_\_ Contract \_\_\_\_\_

2. \_\_\_\_\_ Telephone No. \_\_\_\_\_

\_\_\_\_\_ Contract \_\_\_\_\_

3. \_\_\_\_\_ Telephone No. \_\_\_\_\_

\_\_\_\_\_ Contract \_\_\_\_\_

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352  
(See reverse for public burden disclosure.)

Approved by  
OM  
0348-0046

[illegible]

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individuals(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

**DISCLOSURE OF LOBBYING ACTIVITIES  
CONTINUATION SHEET**

Approved by  
OM  
0348-0046

Reporting Entity: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

SMALL BUSINESS SUBCONTRACTING PLAN  
(APPLICABLE TO LARGE BUSINESS ONLY)

DATE: \_\_\_\_\_

SUBCONTRACTING PLAN FOR SOLICITATION NUMBER: \_\_\_\_\_

CONTRACT NUMBER: \_\_\_\_\_

DESCRIPTION OF WORK REQUIRED TO PERFORM THE CONTRACT:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUBMITTED TO:

U.S. ARMY CORPS OF ENGINEERS, LITTLE ROCK DISTRICT  
ATTN: CESWL-CT  
P.O.BOX 867,  
Little Rock, AR 72203-0867

SUBMITTED BY:

COMPANY'S NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_ FAX: \_\_\_\_\_

POINT OF CONTACT: \_\_\_\_\_

This Subcontracting Plan is submitted in accordance with Federal Acquisition Regulation (FAR) clause 52.219-9 "Small Business Subcontracting Plan" and 52.219-8 "Utilization of Small Business Concerns"; and Department of Defense FAR Supplement 252.219-7003. Also, Army FAR Supplement (AFAR) Subpart 19.7 and Engineer Far Supplement (EFARS) Subpart 19.7 "Subcontracting with Small Business, Small Disadvantaged and Woman-Owned Small Business Concerns.

1. Dollar Amounts and subcontracting goals percentage.

	<u>Amount</u>	<u>Percentage</u>
a. Prime Contract	\$_____	<u>100</u> %.
b. Planned subcontracting	\$_____	_____%.((b/1a)x100)
(1) Large Business (LB)	\$_____	_____%.((b(1))/b)x100)
(2) Small Business (SB)	\$_____	_____%.((b(2))/b)x100)
(a) Historically Underutilized Business Zone		
(HUBZone) SB:	\$_____	_____%.((2)(a)/b)x100)
(b) Women-Owned Small Business (WOSB):		
	\$_____	_____%.((2)(b)/b)x100)
(c) Veteran-Owned Small Business (VOSB):		
	\$_____	_____%.((2)(c)/b)x100)
(d) Small Disadvantaged Business (SDB)		
	\$_____	_____%.((2)(d)/b)x100)
(e) Historically Black Colleges and Universities and		
Minority Institutions (HBCU/MIs):		
	\$_____	_____%.((2)(e)/b)x100)
(f) Service-Disabled Veteran-Owned Small Business		
(SDVOSB)	\$_____	_____%.((2)(f)/b)x100)

If goal is zero for any category (2)(a) thru (2)(f) above, give justification: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. a. The principal items or areas we will seek to subcontract under this contract are:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b. Of these items or areas stated in item 2a; the following are considered appropriate for award of subcontracts to

(1) SB: \_\_\_\_\_

\_\_\_\_\_

(2) HUBZone SB: \_\_\_\_\_

\_\_\_\_\_

(3) WOSB: \_\_\_\_\_

\_\_\_\_\_

(4) VOSB: \_\_\_\_\_

\_\_\_\_\_

(5) SDB Concerns, and HBCU/MIs: \_\_\_\_\_

\_\_\_\_\_

(6) SDVOSB Concerns: \_\_\_\_\_

\_\_\_\_\_

3. The method used to develop the above subcontracting goals is described as follows: (i.e., Statements explaining how the product and service areas to be subcontracted were established; how the areas to be subcontracted to SB, HubZone, SDB, WOSB, VOSB and SDVOSB concerns were determined, and how these concerns capabilities were determined, to include identification of sources lists utilized in making these determinations.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. The method used to identify potential sources for solicitation purpose is as follows:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Indirect costs are ( ) are not ( ) included in the goals. If indirect costs are included, a description of the method used to determine the proportionate share of indirect costs to be incurred with SB, HUBZone, WOSB, VOSB, SDVOSB and SDB concerns follows:



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6. The individual who will administer the firm's subcontracting program is:

a. Name and Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number: \_\_\_\_\_

b. A Description of the duties of the subcontracting plan administrator are as follows: General overall responsibility for this company's SB program, the development, preparation and execution of individual subcontracting plans and for monitoring performance relative to contractual subcontracting requirements contained in this plan. This would include but would not be limited to:

(1) Developing and maintaining bidders list of SB, HUBZone, SDB, WOSB, SDVOSB and VOSB concerns from all possible sources.

(2) Ensuring that procurement packages are structured to permit SB, HUBZone, SDB, WOSB, SDVOSB and VOSB concerns participation to the maximum extent possible.

(3) Assuring inclusion of SB, HUBZone, SDB, WOSB, SDVOSB and VOSB concerns in all solicitations for products or services that they are capable of providing.

(4) Reviewing solicitations to remove statements, clauses, etc. which may tend to restrict or prohibit SB, HUBZone, SDB, WOSB, SDVOSB and VOSB participation.

(5) Ensuring periodic rotation of potential subcontractors on bidders list.

(6) Ensuring that the bid proposal review board documents its' reasons for not selecting low bids submitted by SB, HUBZone, SDB, WOSB, SDVOSB and VOSB concerns.

(7) Ensuring the establishment and maintenance of records of solicitations and subcontract award activity.

(8) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status.

(9) Attending or arranging for attendance of company counselors at Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, etc.

(10) Providing technical assistance (i.e. engineering, quality control and managerial assistance) to SB, HUBZone, SDB, HBCU/MIs, WOSB, SDVOSB and VOSB as needed.

(11) Ensuring that HBCU/MIs will be provided the maximum practicable opportunities to participate.

(12) Monitoring attainment of proposed goals.

(13) Preparing and submitting periodic subcontracting reports as required.

(14) Coordinating contractor's activities during the conduct of compliance reviews by Federal Agencies.

(15) Coordinating the conduct of the contractor activities involving its SB, HUBZone, SDB, WOSB, SDVOSB and VOSB subcontracting program.

(16) Additions to the duties specified above are as follows:

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8. The company will make the following efforts to assure that SB, HUBZone SB, SDB, WOSB, SDVOSB and VOSB concerns will have an equitable opportunity to compete for subcontracts.

a. Outreach efforts to include contacts with SB trade associations and business development organizations.

b. Attendance at small business procurement conferences and trade fairs.

c. Sources will be obtained from SBA's Procurement Marketing and Access Network (PRO-NET) listing, SDBs, and HUBZone SB concerns listings, and SBA's Sub-Net.

d. SB, HUBZone, SDB, HBCU/MIs, WOSB, SDVOSB and VOSB concerns source lists guides and other data identifying these type of concerns will be maintained and utilized by buyers in soliciting subcontracts.

e. Additions to the above listed efforts follow:

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9. The company will include the clause entitled "Utilization of Small Business Concerns" 52.219-8, in all subcontracts which offer further subcontracting opportunities and will require all subcontractors (except SB concerns) who receive subcontracts in excess of \$500,000 (\$1,000,000 for construction) that has subcontracting possibilities, to adopt and comply with a plan similar to the plan agreed to by this firm. The plan will comply with the requirements of the clause 52.219-9, "Small Business Subcontracting Plan". Such plans will be reviewed by comparing them with the requirements of the clause 52.219-9, and assuring that all minimum requirements of an acceptable subcontracting plan have been satisfied. The acceptability of percentage goals shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of potential small business concerns and prior experience. Once approved and implemented, the plan will be monitored through the submission of periodic reports, and/or, as time and availability of funds permit, periodic visits to the subcontractors facilities to review applicable records and the subcontracting program progress.

10. The company will submit such periodic reports and cooperate in any studies or surveys conducted by the U.S. Army Corps of Engineers, Little Rock District, or the Small Business Administration (SBA) in order to determine the extent of compliance by the company with the subcontracting plan. Standard Form (SF) 294 "Subcontracting Report for Individual Contracts" and SF 295 "Summary Subcontract Report" will be prepared and submitted no later than 15 days after the close of each reporting period. The company will ensure that its subcontractors (except SB concerns) submit SF 294 and SF 295 when required. The address and telephone number of the office responsible for preparation and submission of the reports is:

Name/Title: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

11. The company will maintain records to demonstrate procedures that have been adopted to comply with the requirements and goals set forth in the plan. In order to be considered acceptable the records shall include at least the following items:

a. SB, HUBZone, SDB, HBCU/MI, WOSB, SDVOSB and VOSB source lists, guides and other data identifying these types of vendors.

b. Organizations contacted or to be contacted for SB, HUBZone, SDB, HBCU/MI, WOSB, SDVOSB and VOSB sources.

c. Records of each subcontract solicitation resulting in an award of more than \$100,000 indicating

(1) whether SB, HUBZone, SDB, HBCU/MI, WOSB, SDVOSB and VOSB concerns were solicited, and if not, why not.

(2) if applicable, the reason award was not made to a small business concern.

d. Records of any outreach efforts, to include Trade Associations, Business Development Organizations, and conferences and trade fairs to locate SB, HUBZone, SDB, HBCU/MI, WOSB, SDVOSB and VOSB sources.

e. Records of internal guidance recognizing commitment to Public Law 99-661, Section 1207, and Public Law 100-180, Section 806, provided to buyers through workshops, seminars, training, and monitoring performance to evaluate compliance with the program's requirements.

f. On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor.

g. Procedures to ensure the timely payment of amounts due subcontractors pursuant to the terms of the subcontracts with SB, HUBZone, SDB, HBCU/MI, WOSB, SDVOSB and VOSB concerns.

h. Records to be maintained in addition to the above are as follows: \_\_\_\_\_

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12. I, the undersigned, a designated officer of \_\_\_\_\_,  
(Company Name)  
do hereby state that the company agrees to carry out the  
Government's policy to provide the maximum practicable  
opportunity for SB, HUBZone, SDB, WOSB, VOSB, SDVOSB and  
HBCU/MIs to participate in the performance of this contract  
consistent with its efficient performance.

\_\_\_\_\_  
(Typed Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

Amend 0001, Encl 3

SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

Measurement and payment will be based on completed work performed in accordance with the drawings and specifications and on the contract payment schedule. No separate payment will be made for scaffolds, safety nets, work platforms, protective coverings, and all other incidentals required to accomplish the work as directed and specified.

1.2 MOBILIZATION

Payment for mobilization will be made at the contract sum job price for Bid Item "Mobilization" of the Bidding Schedule. Price and payment shall constitute full compensation for labor, plant, equipment and incidentals required for moving and preparation of the contractor's floating plant. The contractor's plant and equipment shall be subject to the approval of the Contracting Officer.

1.3 REPLACEMENT OF STRUCTURAL STEEL MEMBERS

1.3.1 Measurement

The unit of measure to be paid for will be for each member of structural steel that is removed and replaced.

1.3.2 Payment

Payment for replacement of structural steel members, with new structural steel members of the same size will be made at the contract unit price each for Bid Item "Replacement of Structural Steel Members" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing plant, labor, materials, equipment and incidentals required to complete the work.

1.4 REPLACEMENT OF STRUCTURAL TEE MEMBERS ON SKIN PLATE

1.4.1 Measurement

The unit of measure to be paid for will be for each section of structural steel that is removed and replaced.

1.4.2 Payment

Payment for removing a section of structural tee members adjacent to the skin plate and replacing the section with new structural steel members of the same size will be made at the contract unit price each for Bid Item "Replacement of Structural Tee Members on Skin Plate" of the Bidding Schedule. Price and payment shall constitute full compensation for

furnishing plant, labor, materials, equipment and incidentals required to complete the work.

#### 1.5 HEAT AND STRAIGHTEN STRUCTURAL MEMBERS

##### 1.5.1 Measurement

The unit of measure to be paid for will be for each structural steel member straightened.

##### 1.5.2 Payment

Payment for heating and straightening structural steel members, will be made at the contract unit price each for Bid Item "Heat and Straighten Structural Steel Members" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing plant, labor, materials, equipment and incidentals required to complete the work.

#### 1.6 GRINDING OF MEMBERS

##### 1.6.1 Measurement

The unit of measure to be paid for will be for each linear foot of grinding members.

##### 1.6.2 Payment

Payment for grinding of members will be made at the contract unit price per linear foot for Bid Item "Grinding of Members" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing plant, labor, materials, equipment and incidentals required to complete the work.

#### 1.7 MISCELLANEOUS WELDING

##### 1.7.1 Measurement

The unit of measurement to be paid for will be for each hour of miscellaneous welding including grinding and other weld preparations.

##### 1.7.2 Payment

Payment for welding of members will be made at the contract unit price per hour for Bid Item "Miscellaneous Welding" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing plant, labor, materials, equipment and incidentals required to complete the work.

#### 1.8 BLAST CLEANING AND PAINTING TAITER GATES

Payment for blast-cleaning and applying 4 coats of vinyl paint on tainter gates will be made at the contract sum job price for Bid Item "Blast-Cleaning and Painting Tainter Gates" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, plant, equipment and incidentals required for blasting, cleaning and painting the gate surfaces as specified and shown, including the protection of concrete piers, gate hoisting cables and machinery, stoplogs and lifting beam, and removal of debris from tainter gates.

1.9 BLAST-CLEANING AND APPLYING 3 COATS OF COAL TAR EPOXY PAINT TO GATE  
HITCH BLOCKS

Payment for blast-cleaning and applying 3 coats, 16 mils, of coal tar epoxy paint to gate hitch blocks will be made at the contract sum job price for Bid Item "Blast-Cleaning and Applying 16 Mils of Coal Tar Epoxy Paint to Gate Hitch Blocks" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, plant, equipment, and incidentals required for blasting, cleaning and painting the tainter gate hitches as specified and shown, including the protection of concrete piers, gate hoisting cables and machinery, stoplogs and lifting beam, and removal of debris from tainter gates

1.10 POWER-TOOL CLEANING AND APPLYING 3 COATS OF PAINT ON TANTIER GATE HOIST  
PLATFORMS

Payment for power tool cleaning and applying 3 coats of paint on tainter gate hoist platforms will be made at the contract sum job price for Bid Item "Power-Tool Cleaning and Applying 3 Coats of Paint on Tainter Gate Hoist Platforms" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, plant, equipment, and incidentals required for cleaning and painting the surfaces as specified and shown.

1.11 STOP LOG INSTALLATION AND REMOVAL

1.11.1 Measurement

The unit of measurement to be paid for will be for each time stop logs are installed and removed from a tainter gate bay. This constitutes one installation and removal per gate unless directed otherwise by the Contracting Officer.

1.11.2 Payment

Payment for installing and removing the stop logs in each bay will be made at the contract unit prices each for Bid Item "STOP LOG Installation and Removal" of the Bidding Schedule. Prices and payments shall constitute full compensation for installing and removing stop logs. Prices also include loading stop logs and lifting beam at the Pine Bluff Marine Terminal and transporting to the job site, removing debris, logs, drift wood and sediment from gate bays, and manipulating the stop logs and lifting beam to accomplish the work. At the completion of the job, stop logs and lifting beam will be loaded, transported, and stored at the Pine Bluff Marine Terminal.

1.12 REMOVAL, PREPARATION, FURNISH, INSTALLATION AND ADJUSTMENT OF SIDE  
SEAL ASSEMBLIES ON TANTIER GATES

Removing, preparing, furnishing, installing and adjusting of side seal assemblies and filler material on 15 tainter gates will be made at the contract sum job price for Bid Item "Removal, Preparation, Furnish, Installation and Adjustment of Side Seal Assemblies on Tainter Gates" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, equipment and incidentals required to complete the work as specified and as shown on the drawings.



### 1.13 REPLACEMENT OF 7.5 LB. ANODES

#### 1.13.1 Measurement

The unit of measurement to be paid for will be for each 7.5 lb. anode replaced.

#### 1.13.2 Payment

Payment for replacing existing 7.5 lb. anodes at existing locations on 15 tainter gates will be made at the contract unit price for each anode under Bid Item "Replacement of 7.5 Lb. Anodes" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, plant, equipment, and incidentals required for furnishing and installing new 7.5 lb. anodes with new  $\frac{1}{2}$ " diameter anode studs to replace existing 7.5 lb. anodes, existing anode studs and including the removal of the existing studs.

### 1.14 REPLACEMENT OF 44 LB. ANODES

#### 1.14.1 Measurement

The unit of measurement to be paid for will be for each 44 lb. anode replaced.

#### 1.14.2 Payment

Payment for replacing existing 44 lb. anodes at existing locations on ~~18-15~~ tainter gates will be made at the contract unit price for each anode under Bid Item "Replacement of 44 lb. Anodes" of the Bidding Schedule. Price and payment shall constitute full compensation for materials, labor, plant, equipment, and incidentals required for furnishing and installing new 44 lb. anodes with new  $\frac{1}{2}$ " diameter anode bolts to replace existing 44 lb. anodes, existing anode bolts and including the removal of the existing bolts.

Amend 0001

### 1.15 CLEANING AND RE-GREASING 30 GATE HOIST MACHINE GEARS

Cleaning and re-greasing 30 spur and pinion gears will be paid for at the contract sum job price for Bid Item "Cleaning and Re-greasing 30 Gate Hoist Machine Gears" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing labor and materials for cleaning and re-greasing the gears.

### 1.16 SPARE ANODES

Payment for spare anodes will be paid for at the contract sum job price for Bid Item "Spare Anodes" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing 10 seven and a half pound anodes, 20 five pound anodes and 20 forty-four pound anodes, including all nuts, bolts, studs, washers, and all other materials specified.

### 1.17 BLAST CLEANING AND PAINTING 60-FOOT STOPLOGS

Payment for blast-cleaning and applying 4 coats of vinyl paint on the 60-foot stoplogs, including installation of new hollow bulb seals, will be made at the contract sum job price for Bid Item "Blast-Cleaning and Painting 60-Foot Stoplogs" of the Bidding Schedule. Price and payment

shall constitute full compensation for materials, labor, plant, equipment and incidentals required for blasting, cleaning and painting the gate surfaces as specified and shown, including removal of debris from stoplogs.

1.18 REPLACING GREASE FITTINGS AND RE-GREASING HITCH BLOCK ASSEMBLIES

Replacing grease fittings and re-greasing hitch block assemblies will be paid for at the contract sum job price for Bid Item "Replacing Grease Fittings and Re-greasing Hitch Block Assemblies" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing labor and materials for replacing the grease fittings and re-greasing the hitch block assemblies.

1.19 DEMOBILIZATION

Payment for demobilization will be made at the contract sum job price for Bid Item "Demobilization" of the Bidding Schedule. Price and payment shall constitute full compensation for labor, plant, equipment and incidentals required for site cleanup, preparation and transportation of the contractor's floating plant.

1.20 ADDITIONAL REPAIRS TO CABLE HITCH BLOCKS

Payment for additional repairs to 30 hitch blocks will be made at the contract sum job price for Bid Item "Additional Repairs to Cable Hitch Blocks" of the Bidding Schedule. Price and payment shall constitute full compensation for furnishing plant, labor, materials, equipment and incidentals for additional repairs to 30 cable hitch blocks, as specified.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section --

Amend 0001, Encl 4

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers as follows:

SD-01 Preconstruction Submittals

Certificates of insurance.  
Surety bonds.  
List of proposed subcontractors.  
List of proposed products.  
Construction Progress Schedule.  
Submittal schedule.  
Schedule of values.  
Health and safety plan.  
Work plan.  
Quality control plan.  
Environmental protection plan.

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the contractor for integrating the product or system into the project.

Drawings prepared by or for the contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or

approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

#### SD-05 Design Data

Calculations, mix designs, analyses or other data pertaining to a part of work.

#### SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports

Daily checklists

Final acceptance test and operational test procedure

#### SD-07 Certificates

Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

#### SD-08 Manufacturer's Instructions

Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data sheets concerning impedances, hazards and safety precautions.

#### SD-09 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.

Factory test reports.

#### SD-10 Operation and Maintenance Data

Data that is furnished by the manufacturer, or the system provider, to the equipment operating and maintenance personnel. This data is needed by operating and maintenance personnel for the safe and efficient operation, maintenance and repair of the item.

#### SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

### 1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

#### 1.2.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

#### 1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

### 1.3 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After the Contracting Officer has approved submittals, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

### 1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any

correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

#### 1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

#### PART 2 PRODUCTS (NOT APPLICABLE)

#### PART 3 EXECUTION

##### 3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and the A/E Designer, and each item shall be stamped, signed, and dated by the CQC System Manager and the A/E Designer indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

##### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The contractor shall use the Resident Management System (RMS), as described in Section 01312, to generate the submittal register. The Contractor will be responsible for providing the submittal register as a diskette containing the computerized ENG Form 4288 in RMS on diskette. The Government will determine which submittals will be Government Approved and the Reviewing Office. The Contractor shall submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within ten calendar days after Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

### 3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 60 calendar days shall be allowed and shown on the register for review and approval of submittals for HVAC control systems.

### 3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. Filling out all the heading blank spaces and identifying each item submitted shall properly complete this form. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

### 3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 3.5.1 Procedures

For Information Only - Submit 3 copies to US Army Corps of Engineers, Construction Branch, 700 West Capitol, Little Rock Arkansas, 72203-0867 (except for those items that the ~~Central Arkansas Area Office (CAAO)~~ South Arkansas Construction Resident Office (SACRO) is the primary reviewer) and ~~one information copy~~ one original and one copy to the ~~CAAO, Corps of Engineers Construction Office, P.O. Box 219, Jacksonville, Arkansas, 72076~~ SACRO, South Arkansas Construction Resident Office, 4003 Port Road, Pine Bluff, Arkansas 71601 (Reverse if ~~CAAO-SACRO~~ is the primary reviewer). One copy will be returned to Contractor. ~~CAAO-SACRO~~ only submittals will be indicated on RMS.

Amend 0001

Government Approved - Submit 5 copies to US Army Corps of Engineers, Construction Branch, 700 West Capitol, Little Rock Arkansas, 72203-0867 and one copy to the SACRO, South Arkansas Construction Resident Office, 4003 Port Road, Pine Bluff, Arkansas 71601 ~~CAAO, Corps of Engineers Construction Office, P.O. Box 219, Jacksonville, Arkansas, 72076~~. (Reverse if ~~CAAO-SACRO~~ is the primary reviewer). Two copies will be returned to Contractor.

#### 3.5.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The A/E Designer shall review all deviations requested and identify all variations and non-conformance with the RFP requirements/approved final documents requirements. The

Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

### 3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

### 3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Normally, two copies of the submittal will be returned to the Contractor and the Contracting Officer will retain additional copies.

### 3.8 INFORMATION ONLY SUBMITTALS

Normally on information only submittals one copy will be returned to the Contractor. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

### 3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

<b>CONTRACTOR</b>  (Firm Name)
  _____ Approved
  _____ Approved with corrections as noted on submittal data and/or attached sheets(s).
  <b>SIGNATURE:</b> _____
  <b>TITLE:</b> _____
  <b>DATE:</b> _____



-- End of Section --

SUBMITTAL REGISTER				TITLE AND LOCATION: Rehab & Paint Tainter Gates and Stoplogs, L&D 5														Solicitation No.W9127S-05-R-0012													
				CONTRACTOR:										CONTRACT:																	
				TYPE OF SUBMITTAL										Classi fication		Reviewing Office		Contractor Scheduled Dates			Contr Actions		Govt Actions								
Activity No.	Transmittal No.	Section Number	Paragraph Number	Description of Submittal	01-PRECON SUBMITTALS	02-SHOP DRAWINGS	03-PRODUCT DATA	04-SAMPLES	05-DESIGN DATA	06-TEST REPORTS	07-CERTIFICATES	08-MFRS INSTRUCTIONS	09-MFRS FIELD REPORT	10-O&M DATA	11-CLOSEOUT SUBMITTALS	Information Only	Government Approved	DO-District Office	AO-Area Office	RO-Resident Office	PO-Project Office	AE-Architect /Engineer	Submit	Approval Needed By	Material Needed By	Action Code	Date of Action	Action Code	Date of Action	Remarks	
		01510	1.15.2	Mooring Plan to protect Floating Plant			X										X		X											Amend 0001	
		01510	1.17.2	Contractor's Property Control System	X												X		X											Amend 0001	
		01525	1.2	Accident Prevention Plan (APP)	X												X														
		01525	1.2	Activity Hazard Analysis (AHA)	X												X														
		01525	1.2	Accident Reports						X							X														
		01525	1.2	Monthly Exposure Reports						X							X														
		01525	1.2	Regulatory Citations and Violations						X							X														
		01540	3.2.2	Outline instructions on removal/installation side seal assemblies								X					X		X												Amend 0001
		05090	1.4	Welding Procedure Qualifications			X										X														
		05090	1.4	Welder, Welding Operator and Tacker Qualifications			X										X														
		05090	1.4	Inspector Qualification			X										X														
		05090	1.4	Quality Control					X								X														
		05120	1.3	Drawings		X											X														
		05120	1.3	Mill Test Reports						X							X														
		05500	1.2	Miscellaneous Metal Items		X											X														
		05500	1.2	Samples of Gaskets and Rubber Seals				X									X														
		09965	1.2	Qualifications and Experience			X										X														
		09965	1.2	Respiratory Protection Program			X										X														
		09965	1.2	Airborne Sampling Plan			X										X														
		09965	1.2	Waste Classification, Handling, and Disposal			X										X														
		09965	1.2	Containment Plan			X										X														
		09965	1.2	Water Quality Plan			X										X														
		09965	1.2	Special Paint Formulas				X									X														
		09965	1.2	Specifications and Proprietary Paints				X									X														
		09965	1.2	Thinners				X									X														
		09965	1.2	Inspections and Operations					X								X														
		13110	1.2	Shop Drawings		X											X														
		13110	1.2	Equipment			X										X														
		13110	1.2	Spare Parts			X										X														

Amend 0001, Encl 6

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740 (2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (2001) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site. A full-time Contractor Quality Control (CQC) System Manager is required.

Amend 0001

### 3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 20 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

#### 3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall be separate from the production side of the company and who shall report directly to upper management.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.
- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

### 3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

### 3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

### 3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 15 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

### 3.4 QUALITY CONTROL ORGANIZATION

#### 3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, show drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

#### 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of 5 years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

#### 3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered at Little Rock District Corps of Engineers, Federal Office Building, 700 W. Capitol, Little Rock, AR. The course will also be offered on an as-needed basis for specific contracts when the proposed CQC System Manager has not previously attended the training. The Contracting Officer or Authorized Representative shall be informed at the Preconstruction Conference if this service is needed. A nominal charge will apply to cover reproduction of the required manual. The CQC System Manager may be accepted, at the Contracting Officer's discretion, conditioned upon completion of the course.

#### 3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

#### 3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

#### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the

preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

#### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

#### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

#### 3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.



### 3.7 TESTS

#### 3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

#### 3.7.2 Testing Laboratories

##### 3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

##### 3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1000 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

#### 3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the address to be furnished by the Contracting Officer.

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

### 3.8 COMPLETION INSPECTION

#### 3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

#### 3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager will be responsible to record all Pre-Final Inspection comments and shall ensure that all items on this list have been corrected before notifying the Government that the work is ready to schedule a Final Inspection with the customer. A typed copy of the Pre-Final Inspection comments (and an electronic copy in WORD format) shall be provided to the Government no later than 8:00 a.m. of the morning following the Pre-Final Inspection. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

#### 3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands

may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction". The Contractor's CQC System Manager shall be responsible to record all Final Inspection comments and shall provide a copy of the handwritten comments at the conclusion of the Final Inspection. A typed copy of the Final Inspection comments (and an electronic copy in WORD format) shall be provided to the Government no later than 8:00 a.m. of the morning following the Final Inspection.

### 3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 48 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

### 3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

### 3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

Amend 0001, Encl 7

SECTION 01510

GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ENGINEER MANUAL PUBLICATIONS (EM)

EM 385-1-1 (2003) Safety and Health Requirements Manual

CODE OF FEDERAL REGULATIONS

29 CFR, PT 1926	(Latest) Safety and Health Regulations for Construction
33 CFR B1	(Latest) Appendix A
33 CFR, PT 84	(Latest) Annex I: Positioning and Technical Detail of Lights and Shapes
33 CFR, PT 85	(Latest) Annex II: Additional Signals for Fishing Vessels Fishing in Close Proximity
33 CFR, PT 86	(Latest) Annex III: Technical Details of Sound Signal Appliances
33 CFR, PT 87	(Latest) Annex IV: Distress Signals
33 CFR, PT 88	(Latest) Annex V: Pilot Rules
33 CFR, PT 89	(Latest) Inland Navigation Rules: Implementing Rules
33 CFR 155.320	(Latest) Fuel Oil and Boat Lubricating Oil Discharge Containment
33 CFR 156.120	(Latest) Requirements for Transfer

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work covered under this section of the specifications; all costs in connection therewith shall be included in the contract unit or sum job price or prices for the work to be performed under the contract.

1.3 BULLETIN BOARD

The Contractor shall furnish, install, and maintain for the duration of the contract, a weathertight bulletin board, having hinged or sliding glazed doors, on which shall be displayed legible copies of (1) the poster entitled "equal employment opportunity is the law" (OFCCP Publication 1420) as required by CONTRACT CLAUSES: EQUAL OPPORTUNITY, AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION, AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS, AND AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS; (2) the Notice to Employees Poster (WH Publication 1321); (3) the schedule of minimum wage rates for the contract as required by CONTRACT CLAUSE: DAVIS-BACON ACT; and (4) current safety posters. The bulletin board shall be mounted where and as approved by the Contracting Officer, in a prominent place accessible to all employees of the Contractor and subcontractors, and to applicants for employment. The bulletin board shall remain the property of the Contractor and shall be removed by him upon completion of the contract work.

#### 1.4 SAFETY AND HEALTH REQUIREMENTS

##### 1.4.1 General

The Contractor shall comply with all applicable provisions of Engineer Manual EM 385-1-1, Safety and Health Requirements Manual, referenced in CONTRACT CLAUSE: ACCIDENT PREVENTION and Occupational Safety and Health Act (OSHA) Standards for Construction (Title 29, Code of Federal Regulations Part 1926 as revised from time to time). The most stringent requirements of the two standards will be applicable.

#### 1.5 QUALITY CONTROL

##### 1.5.1 General

The Contractor shall establish and maintain quality control for his operations to assure compliance with contract requirements and maintain records of his quality control for all construction operations under the contract as specified in SECTION: CONTRACTOR QUALITY CONTROL.

##### 1.5.2 Technical Provisions

This requirement shall apply equally to each section of the Technical Provisions, except where therein the QUALITY CONTROL requirements set forth critical items of work requiring special attention by the Contractor.

##### 1.5.3 Quality Control Inspector Safety Responsibilities

Each Contractor quality control inspector shall be responsible for inspecting the work under his surveillance for compliance with EM 385-1-1, Safety and Health Requirements Manual, and shall immediately bring to the attention of the Contractor's supervisory personnel all unsafe working conditions, unsafe work practices, unsafe tools or equipment and instances of noncompliance with the Safety and Health Requirements Manual.

##### 1.5.4 Quality Control Inspector Environmental Responsibilities

The Contractor quality control inspector shall be responsible for quality control for environment protection specified in SECTION: ENVIRONMENTAL PROTECTION, and shall immediately bring to the attention of the Contractor's

supervisory personnel all instances of noncompliance with the requirements of  
SECTION: ENVIRONMENTAL PROTECTION.

#### 1.5.5 Records and Tests

A copy of the records and tests, as well as the records of corrective action taken, will be furnished the Government as directed by the Contracting Officer.

### 1.6 PROTECTION OF GOVERNMENT PROPERTY

#### 1.6.1 Protection of Government Property

The Contractor shall take measures necessary for protection of the existing buildings, grounds, parking area and other Government facilities.

#### 1.6.2 Protection of Equipment and Concrete Surfaces

The Contractor shall take measures necessary for protection of the existing concrete surfaces, equipment, and machinery. Sheathing shall be in place before painting activities begin. Paint spills, over spray, and other damages shall be cleaned up or repaired.

### 1.7 WORK HOURS

The Contractor shall arrange his work schedule so that work performed at the Government installation will be during the normal day shift established as 8:00 a.m. to 4:30 p.m., Monday through Friday. Contractor work at the installation during other periods of time will be permitted only on the specific approval of the Contracting Officer or his authorized representative for each specified time. If an operation cannot be completed within the day shift period specified above without loss or additional cost to the Contractor, the workday period for that operation may be extended upon request of the Contractor and approval of the Contracting Officer.

### 1.8 WORK AREA AND STORAGE AREA

The Contractor's work and storage area shall be confined to the areas designated by the Contracting Officer. Work and storage areas shall typically be within fenced areas of the lock and dam.

### 1.9 SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Department of the Army and of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65 feet in lengths moored or anchored in a fairway or channel, and the passing of other vessels of floating plant working in navigable channels, as set forth in Commandant U.S. Coast Guard Instruction M16672.2, Navigation Rules: International Inland (COMOTINST M16672.2), or 33 CFRB1 Appendix A (International) and 33 CFR 84 Through 33 CFR 89 (Inland) as applicable.

#### 1.10 FUEL OIL TRANSFER SAFETY REQUIREMENTS

All marine plant used in this contract shall meet applicable U.S. Coast Guard regulations for fuel oil transfer operations. For uninspected vessels, Coast Guard regulations contained in 33 CFR 156.120 and 33 CFR 155.320 regarding fuel coupling devices and provisions for fuel oil discharge containment are applicable. Venting of the fuel tanks is necessary when using the couplings prescribed by 33 CFR 156.120(1) or (2). (SWDSO dated 4 Mar 81, LRD).

#### 1.11 WORK UNDER THIS CONTRACT

The work involves furnishing floating plant, equipment, materials, and labor necessary to perform the painting, repair, and maintenance on the dam, as specified and shown. Work on the dam includes blasting and painting 15 tainter gates and 30 hitch blocks; blasting and painting 30 trunnions; power tool cleaning and painting hoist machinery platforms; replace existing side seal assemblies with new side seal assemblies on 15 tainter gates; replacing and repairing structural members on tainter gates, and blasting and painting of 5 stoplogs. Lock ~~an~~ and Dam #5 has 15 tainter gates that are approximately 60 feet wide by 32 feet high.

Amend 0001

#### 1.12 PROTECTION OF GOVERNMENT PROPERTY

##### 1.12.1 Protection of Government Facilities

The Contractor shall take whatever measures are necessary or required for protection of the existing buildings, grounds, parking area and other Government facilities.

##### 1.12.2 Protection of Equipment and Concrete Surfaces

The Contractor shall take whatever measures are necessary or required for protection of the existing concrete surfaces, equipment and machinery from the Contractor's operations, as approved by the Contracting Officer. All paint spills and oversprays and other damages shall be cleaned up and/or repaired, as approved by the Contracting Officer.

#### 1.13 FUEL OIL TRANSFER SAFETY REQUIREMENTS

All marine plant used in this contact shall meet applicable U.S. Coast Guard regulations for fuel oil transfer operations. For uninspected vessels, Coast Guard regulations contained in 33 CFR 156.120 and 33 CFR 155.320 regarding fuel coupling devices and provisions for fuel oil discharge containment are applicable. Venting of the fuel tanks is necessary when using the couplings prescribed by 33 CFR 156.120(1) or (2). (SWDSO dated 4 Mar 81, LRD).

#### 1.14 GOVERNMENT PROPERTY FOR USE BY THE CONTRACTOR TO PERFORM WORK

##### 1.14.1 Stoplogs and Lifting Beam for Tainter Gate Bays

The Government will make available to the Contractor for use in performing the work 30 stoplogs and one lifting beam. This number of stoplogs is sufficient for performing work on three gate bays at one time. The Contractor shall not use stoplogs with bent or damaged members. If damaged



members are discovered, the Contracting Officer shall be notified immediately. The lifting beam and stoplogs will be made available to the Contractor at their storage site in the Pine Bluff Marine Terminal at Pine Bluff, AR. The Contractor shall load and transport the stoplogs and lifting beam from their storage site to his floating plant, install and remove the stoplogs as required for the performance of the work, transport the stoplogs and lifting beam back to their storage site, and store the items as directed by the Contracting Officer. The Contractor shall assume responsibility for all Government property while in his possession and control. Damage to the Government property while in the Contractor's possession and control shall be corrected to the satisfaction of the Contracting Officer by and at the expense of the Contractor. Care of Government property is specified below. Stoplog installation requirements are specified in SECTION: MARINE WORK.

#### 1.15 PROTECTION OF DAM AND APPURTENANCES

##### 1.15.1 Protection of Gate Hoist Machinery

Every precaution shall be taken by the Contractor to prevent sand, paint, and other foreign material from being deposited on the gate hoist machinery and gate lifting cables. Prior to commencing sandblasting operations the equipment shall be completely covered with an approved covering of sufficient size as to completely shield each hoist machine of the gates being worked on. Depending upon wind conditions and/or fogging of sand or paint, adjacent hoist machinery shall be protected as directed by the Contracting Officer. The gate hoist ropes and the side seal plates shall not be sandblasted nor painted. Punctures and tears in the shielding material shall be immediately repaired and sealed. Removal of the shielding material shall be with care to avoid dropping any foreign material, such as sand, on the cables or machinery. In the event that foreign materials are unavoidably deposited on the cables or machinery the materials shall be completely removed; and if foreign materials are deposited on the gear grease, the grease shall be removed and the gears regreased prior to operating the respective gate machine. If removing the grease from the cable drum or grease is necessary, it shall be ~~preformed~~performed in such manner as to prevent grease from dropping on the concrete, machinery, tainter gate, or in the river. The gear grease shall be removed down to bare metal using mineral spirits or other applicable solvents having a flashpoint above 100 degrees F. The solvent cleaning shall be done with clean cloths and clean fluids to avoid leaving a thin film of greasy residue on the surfaces to be regreased. The grease furnished by the Contractor for regreasing shall be Keystone Moly 29, and shall be applied in a manner acceptable to the Contracting Officer. Protection of gate hoist machinery will be paid for as specified in SECTION: MEASUREMENT AND PAYMENT.

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##### 1.15.2 Protection From Damage by Floating Plant

The Contractor shall provide and maintain means for securely mooring (and softening the impact of) barges or other floating work platforms to prevent damage to the piers, gate structure, and stoplogs, throughout the life of the contract. Proposed mooring devices and procedures, impact-softening devices, and general layout of equipment proposed for use on barges or floating platforms shall be submitted for approval prior to commencement of work.

##### 1.15.3 Protection From Sandblasting and Paint Overspray

The Contractor shall furnish items as required to prevent sandblasting and paint overspray on the surfaces of the concrete piers, stoplogs, hoist machines, and any other surfaces not designated to be painted under this contract. Protective items and procedures shall be approved by the Contracting Officer. Concrete piers adjacent to the gates shall be protected to prevent damage from sandblasting and prevent coating with paint. Protection from sandblasting and paint overspray will be paid for as specified in SECTION: MEASUREMENT AND PAYMENT.

#### 1.16 ORDER OF WORK

See Section: PAINTING, where requirements for paint testing indicate that at least a 30-day period must be allowed for Government testing of all paint to be used in the work under this contract. Work on the gates shall be restricted to adjacent gates, and shall be performed under river flow conditions as indicated in paragraph: GATE OPERATION AND POOL REGULATION below. Maintenance painting operations shall start on the lock end of the dam and proceed across the river.

#### 1.17 GATE OPERATION AND POOL REGULATION

Pool regulation will be the responsibility of the Government and the required work shall be scheduled accordingly. At times during high flows and large discharge periods the water levels downstream from the dam may reach heights that would require removal of the floating plant and stoplogs. The Contracting Officer will notify the Contractor approximately 12 hours on average in advance of being required to be ready for passage of high flows. Floating plant may be based upstream or downstream of the dam for painting operations, however, during periods of low river flows the water level in the stilling basin may not be adequate for floating plant operation.

##### 1.17.1 Gate Operation

The full spillway discharge capacity may be required to pass river flows. The Contractor shall cease work when the discharges result in unacceptable work conditions upstream of the dam or when unacceptable turbulence occurs downstream of the dam. More than three gates may be closed during low flows if permitted by the Contracting Officer. Also, it may be possible to open some of the closed gates without interfering with the Contractor's operations and thereby minimize delays. The tainter gates will be adjusted by the Contracting Officer to reduce the turbulence and minimize possible erosion of the streambed of the stilling basin. The gate opening differential between adjacent tainter gates will be limited to a maximum of 1 foot to prevent erosion of the stream bed adjacent to the stilling basin. This will limit the maximum flow at which the Contractor can have gates closed for maintenance repairs. Conditions requiring all of the tainter gates to be opened will vary with the Arkansas River discharge and the number and location of the gates that are closed. Based on the discharge, gate locations, and the average monthly Arkansas River discharge duration, an estimate of the probability of work stoppage has been prepared and is presented in the tables at the end of this section.

Amend 0001

##### 1.17.2 Operation of Gates on Which Work is Being Performed

The Contractor shall raise and lower the tainter gates begin painted under the supervision of the Government personnel. The Contractor shall assume responsibility for the gate hoisting equipment while under this operation,

and shall repair any damage to the equipment caused by his operations at his expense. The tainter gate locking procedure shall be employed while the gate is being repaired in a raised position. A sketch and instructions of the locking procedure is included at the end of ~~this section~~ the SECTION: MARINE WORK.

Amend 0001

#### 1.18.31.17.3 Stoplog Handling Caused by River Stages

At times during high flows the water may reach heights that will require removal of the floating plant and stop logs. Stoplog removal and reinstallation that is required because of river stages, and not otherwise required for the normal execution of the work as shown and specified, shall be as directed by securing the written permission of the Contracting Officer. If the Contracting Officer directs the Contractor to remove stoplogs and reinstall them, the removal and reinstallation will be paid for as specified in SECTION: MEASUREMENT AND PAYMENT.

#### 1.18 Not Used.

### 1.19 CARE, MAINTENANCE AND UTILIZATION OF GOVERNMENT PROPERTY

#### 1.19.1 Scope

This paragraph establishes minimum requirements as to care, maintenance and utilization of Government property in the Contractor's possession or control from the time of receipt of the property until properly relieved of responsibility in accordance with the contract. The removal of Government property to storage, or its contemplated transfer to another location, does not relieve the Contractor of these responsibilities.

#### 1.19.2 Contractor's Maintenance Program

The Contractor shall establish and maintain a system to control, protect, preserve, and maintain all Government property. The Contractor's property control system shall be ~~in writing~~ submitted for approval unless the Contracting Officer determines that a written system is not necessary. The Contractor's approved maintenance program shall provide for:

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(1) Policy reflecting the need for and the performance of preventative maintenance;

(2) Policy for reporting of need for capital type rehabilitation, and

(3) Recording of work accomplished under the maintenance program.

##### 1.19.2.1 Preventive Maintenance

Preventive maintenance shall be performed on a regularly scheduled basis to prevent the occurrence of defects, and to detect and correct minor defects before they result in serious consequences. An effective preventive maintenance program shall include inspecting equipment (stoplogs and lifting beam) periodically to assure detection of maladjustment, wear, or impending breakdown; regularly scheduled lubrication of bearings and moving parts of lifting beam; protection from exposure to deteriorating agents such as solvents and thinners; and protection from sandblasting operations.

##### 1.19.2.2 Capital Type Rehabilitation

The Contractor's maintenance program shall provide for the disclosure and reporting of the need for major repair, replacement of parts, and other rehabilitation work for Government property in his possession and control.

#### 1.19.2.3 Records of Maintenance

The Contractor's maintenance program shall provide for sufficient records to show the maintenance actions performed and deficiencies discovered as a result of inspections.

#### 1.19.3 Utilization of Government Property

The Contractor's procedures shall be adequate to assure that the Government property will be utilized only for those purposes authorized in the contract.

#### 1.20 CLEANING AND REGREASING GATE HOIST MACHINE GEARS

After maintenance painting has been completed the Contractor shall clean and re-grease the spur and pinion gears on each gate hoist machine. The cleaning re-greasing operations shall stay at least four gate bays behind the cleaning and painting operations. Each of the 30 spur and pinion gears shall be cleaned down to bare clean metal and greased with Keystone Moly 29 grease. Cleaning and regreasing gate hoist machine gears will be paid for as specified in SECTION: MEASUREMENT AND PAYMENT.

#### 1.21 TEMPORARY ELECTRICITY

Electric power (110 volts) will be furnished at each machinery platform by the Government to the Contractor.

#### 1.22 TEMPORARY WATER

The Contractor shall provide for potable drinking water for his personnel and the Government inspector.

#### 1.23 TEMPORARY SANITARY FACILITIES

The Contractor shall provide for temporary sanitary facilities for his personnel and the Government inspector. Disposal of collected refuse shall not violate the pollution requirements specified in SECTION: ENVIRONMENT PROTECTION.

#### 1.24 ACCESS ON DAM STRUCTURE

Under this contract, access on walkways on dam structure will be limited to personnel only as required to operate gates, subject to approval by the Contracting Officer.

#### 1.25 USE OF EXISTING LINE HOOKS

Line hooks on the dam will be made available to the Contractor for use in mooring floating plant during normal and low flows, subject to the approval of the Contracting Officer. Care shall be taken to prevent damage to handrails. Portions of the handrail may be removed temporarily to prevent damage. Any handrail damaged shall be replaced by and at the expense of the Contractor.

1.26 AFTER AWARD OF CONTRACT

A pre-work conference will be held at such time and location as determined by the Contracting Officer for purpose of discussing and developing mutual understanding between the Contracting Officer's and Contractor's construction, quality control and safety representatives regarding the terms, conditions and requirements of the contract.

1.26.1 The Discussion Will Include But Will Not Be Limited To The Following:

- (1) Contracting parties project staff.
- (2) Correspondence Between organizations and procedures to be followed.
- (3) Safety Program.
- (4) Environment Pollution Control Program
- (5) Lead Based Paint Abatement and Disposal Program
- (6) Non-Painted Items Protection Program
- (7) Quality Control Program
- (8) Other Subjects That May Be of Interest To the Contracting Parties.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

- - End of Section - -

**DATE:** 26-May-05  
**REF:** Lock and Dam No. 5, Arkansas River  
**SUBJ:** Work Stoppage Table for Gate Painting Contract

Revised Attachment to Section 01510, Encl 8

Gates Closed	Maximum Allowable Discharge for HW EL. 213 FT [cfs]	LOCK AND DAM #5 WORK STOPPAGES FOR THREE ADJACENT GATES CLOSED IN PERCENT OF TIME EQUALLED OR EXCEEDED											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,2,3	70,000	13	18	32	38	44	33	16	6	3	10	16	18
2,3,4	62,400	16	22	37	43	49	37	18	7	4	12	19	21
3,4,5	56,200	19	26	41	48	53	40	21	8	6	13	21	24
4,5,6	51,800	23	29	45	52	56	43	23	9	7	14	23	26
5,6,7	48,600	25	31	48	54	59	46	25	10	8	15	25	28
6,7,8	46,500	27	34	50	56	61	47	26	11	8	15	26	29
7,8,9	45,700	28	34	50	57	61	48	26	11	8	16	27	29
8,9,10	46,500	27	34	50	56	61	47	26	11	8	15	26	29
9,10,11	48,600	25	31	48	54	59	46	25	10	8	15	25	28
10,11,12	51,800	23	29	45	52	56	43	23	9	7	14	23	26
11,12,13	56,200	19	26	41	48	53	40	21	8	6	13	21	24
12,13,14	62,400	16	22	37	43	49	37	18	7	4	12	19	21
13,14,15	70,000	13	18	32	38	44	33	16	6	3	10	16	18

Amend 0001, Encl 9

SECTION 01540

MARINE WORK

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the work covered under this section of the specifications; all costs in connection therewith shall be included in the contract unit or sum-job price or prices for the work to be performed under the contract.

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 395	(2001) Test Methods for Rubber Property- Compression
ASTM D 412	(1998) Test Methods for Rubber Properties in Tension
ASTM D 413	(1998) Test Methods for Rubber Property - Adhesion to Flexible Substrate
ASTM D 471	(1998) Test Methods for Rubber Property - Effect of Liquids
ASTM D 572	(1999) Test Methods for Rubber Deterioration by Heat and Oxygen
ASTM D 2240	(2002) Test Methods for Rubber Property - Durometer Hardness

1.3 DESCRIPTION

1.3.1 General

The Contractor shall furnish floating plant and equipment required for transporting and handling stop logs and lifting beam, materials and equipment for performing the work as shown and specified; and incidental materials and equipment as necessary. The floating plant and equipment shall be adequate size to remove and transport stop logs during high river flows. Past experience indicates that a crane capacity of 80 tons or greater is recommended. Safety issues will be foremost for this project. Improperly sized equipment and unsafe construction operations will not be permitted.

### 1.3.2 Mooring of Floating Plant

Floating plant may be based upstream or downstream of the dam for rehab and painting operations, however, during periods of low river flows the water level in the stilling basin may not be adequate for floating plant operation. Line hooks on the dam will be made available to the Contractor for use in mooring the floating plant during normal and low flows, subject to the approval of the Contracting Officer and the limitations of SECTION: GENERAL REQUIREMENTS. The floating plant shall be equipped with timber or rubber bumpers on the side adjacent to the dam. Portions of the handrail may be removed temporarily to prevent damage. Handrail damage shall be replaced and damaged pier nosings shall be repaired.

### 1.3.3 Tainter Gate Locking Device During Repair

The Contractor shall use the government furnished locking devices while all work is being done on each gate. A sketch and instructions are provided at the end of this section.

## PART 2 PRODUCTS (NOT APPLICABLE)

## PART 3 EXECUTION

### 3.1 STOP LOG INSTALLATION

The stop logs shall be installed by the Contractor using the lifting beam to lift and move the stop logs. The Contractor shall assume responsibility for Government property while in his possession and control. Damage to the Government property while in the Contractor's possession and control shall be satisfactorily corrected. Care, maintenance and utilization of the stop logs and lifting beam are specified in SECTION: GENERAL REQUIREMENTS. It is anticipated that sediment will have deposited on the gate sills and stop log slots, in which case the Contractor shall clear the sill and slots for proper seating of the stop logs. Government personnel will manipulate the spillway gates to try to flush sediment deposits which may exist on the sill or in the stop log slots to the extent that such sediment can be removed by limited manipulation of the gates. To protect work in progress, splash boards may be required on stop logs to prevent wave action from spilling into work areas. Splash boards shall not be used to protect against a higher pool elevation. Government personnel will furnish lifting beam operating instructions to the Contractor.

### 3.2 REPLACEMENT OF SIDE SEAL ASSEMBLIES

#### 3.2.1 General

The existing side seal assemblies shall be removed and shall be disposed of offsite at the Contractors expense. The metal components of the new side seal assemblies shall be painted before installation in accordance with SECTION: PAINTING. The gate surfaces in the area of the removed seal assemblies shall be blast cleaned and painted prior to installing the new seal assemblies. Magnesium anodes shall be installed as specified in SECTION: CATHODIC PROTECTION SYSTEM and as shown on the drawings. Coordination among construction trades will be required. Rubber gaskets shall be furnished and installed to replace the existing gaskets as shown and as specified below.



### 3.2.2 Preparation of Side Seal Assemblies

The Contractor shall submit, for approval, an outline on how to remove and install side seal assemblies. The leg of the angle that is bolted to the skin plate shall be marked to provide for ~~drilling or~~ punching slotted holes to match existing holes in the old side seal angle. The new side seal assemblies and the existing side seal assemblies shall have the same radius, therefore the existing side seal angle may be used as a template for ~~drilling or~~ punching the slotted holes to match the holes in the skin plate. Other methods for locating holes in side seal assemblies shall be subject to approval by the Contracting Officer. Slotted holes shall be punched in the side seal assembly by the installing Contractor.

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### 3.2.3 Installation of Side Seal Assemblies

Installation of new contractor furnished side seal assemblies will require normal ironworker skills including use of drift pins, wedges, jacks, chain or cable hoists and other devices normally used for fitting structural steel members together. Seals shall be installed on the gate using the new stainless steel bolts, washers, and nuts provided by the Contractor. Contractor furnished bolts, washers and nuts shall be in accordance with SECTION: SEAL ASSEMBLY FABRICATION.

### 3.2.4 Adjustment of Side Seal Assemblies

The side seal assemblies on tainter gates shall be adjusted to the dimensions shown on the contract drawings with the gate in the closed position except as provided below. That portion of the seals which would be submerged by the lower pool shall be adjusted at the lowest position practicable but not greater than 6 feet above the lower pool existing at time of adjustment. Adjustment of the side seals assemblies shall be performed as outlined below:

The side seal assemblies shall be adjusted so that the rubber seal retaining bar is not less than 7/16 inch, nor more than 11/16 inch from the embedded seal plate to prevent contact between "J" bulb and side seal angle. This adjustment shall be made with the existing slotted holes if practicable. After adjustment of the seals, no steel component of the gate side seal assembly shall pass closer than ¼-inch to the embedded seal plate when the gate is raised from the closed position to the fully open position unless otherwise approved by the Contracting Officer.

### 3.3 REMOVAL OF DEBRIS

Substantial accumulations of debris, including large logs, can be expected in gate bays and on tainter gates. The Contractor shall remove such debris from the gate bays prior to placing stop logs. Prior to painting operations, driftwood, debris, silt or floatable or nonfloatable materials that are on or against tainter gates shall be removed. Debris removed from tainter gates shall be disposed off site at the Contractor's expense.

-- End Of Section --

Amend 0001, Encl 10

SECTION 05090

WELDING, STRUCTURAL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC ASD Spec	(1989) Specification for Structural Steel Buildings - Allowable Stress Design
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AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

ASNT RP SNT-TC-1A	(2001) Recommended Practice SNT-TC-1A
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AMERICAN WELDING SOCIETY (AWS)

AWS A2.4	(1998) Standard Symbols for Welding, Brazing and Nondestructive Examination
AWS A3.0	(2001) Standard Welding Terms and Definitions
AWS D1.1	(2004) Structural Welding Code - Steel
AWS Z49.1	(1999) Safety in Welding and Cutting and Allied Processes

1.2 DEFINITIONS

Definitions of welding terms shall be in accordance with AWS A3.0.

1.3 GENERAL REQUIREMENTS

The design of welded connections shall conform to AISC ASD Spec unless otherwise indicated or specified. Material with welds will not be accepted unless the welding is specified or indicated on the drawings or otherwise approved. Welding shall be as specified in this section, except where additional requirements are shown on the drawings or are specified in other sections. Welding shall not be started until welding procedures, inspectors, nondestructive testing personnel, welders, welding operators, and tackers have been qualified and the submittals approved by the Contracting Officer. Qualification testing shall be performed at or near the work site. Each Contractor performing welding shall maintain records of the test results obtained in welding procedure, welder, welding operator, and tacker performance qualifications.

#### 1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Welding Procedure Qualifications ; G

Welder, Welding Operator, and Tacker Qualification ; G

Inspector Qualification ; G

Copies of the welding procedure specifications; the procedure qualification test records; and the welder, welding operator, or tacker qualification test records.

SD-06 Test Reports

Quality Control ; G

A quality assurance plan and records of tests and inspections.

#### 1.5 WELDING PROCEDURE QUALIFICATIONS

Except for prequalified (per AWS D1.1) and previously qualified procedures, each Contractor performing welding shall record in detail and shall qualify the welding procedure specification for any welding procedure followed in the fabrication of weldments. Qualification of welding procedures shall conform to AWS D1.1 and to the specifications in this section. Copies of the welding procedure specification and the results of the procedure qualification test for each type of welding which requires procedure qualification shall be submitted for approval. Approval of any procedure, however, will not relieve the Contractor of the sole responsibility for producing a finished structure meeting all the requirements of these specifications. This information shall be submitted on the forms in Appendix E of AWS D1.1. Welding procedure specifications shall be individually identified and shall be referenced on the detail drawings and erection drawings, or shall be suitably keyed to the contract drawings. In case of conflict between this specification and AWS D1.1, this specification governs.

##### 1.5.1 Previous Qualifications

Welding procedures previously qualified by test may be accepted for this contract without requalification if the following conditions are met:

a. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.

b. The qualified welding procedure conforms to the requirements of this specification and is applicable to welding conditions encountered under this contract.

c. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

### 1.5.2 Prequalified Procedures

Welding procedures which are considered prequalified as specified in AWS D1.1 will be accepted without further qualification. The Contractor shall submit for approval a listing or an annotated drawing to indicate the joints not prequalified. Procedure qualification shall be required for these joints.

### 1.5.3 Retests

If welding procedure fails to meet the requirements of AWS D1.1, the procedure specification shall be revised and requalified, or at the Contractor's option, welding procedure may be retested in accordance with AWS D1.1. If the welding procedure is qualified through retesting, all test results, including those of test welds that failed to meet the requirements, shall be submitted with the welding procedure.

## 1.6 WELDER, WELDING OPERATOR, AND TACKER QUALIFICATION

Each welder, welding operator, and tacker assigned to work on this contract shall be qualified in accordance with the applicable requirements of AWS D1.1 and as specified in this section. Each welder, welding operator, and tacker assigned to work on this contract shall also have a minimum five years experience on work of similar size and scope. Welders, welding operators, and tackers who make acceptable procedure qualification test welds will be considered qualified for the welding procedure used.

### 1.6.1 Previous Personnel Qualifications

At the discretion of the Contracting Officer, welders, welding operators, and tackers qualified by test within the previous 6 months may be accepted for this contract without requalification if all the following conditions are met:

- a. Copies of the welding procedure specifications, the procedure qualification test records, and the welder, welding operator, and tacker qualification test records are submitted and approved in accordance with the specified requirements for detail drawings.

- b. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.

- c. The previously qualified welding procedure conforms to the requirements of this specification and is applicable to welding conditions encountered under this contract.

- d. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

### 1.6.2 Certificates

Before assigning any welder, welding operator, or tacker to work under this contract, the Contractor shall submit the names of the welders, welding operators, and tackers to be employed, and certification that each individual is qualified as specified. The certification shall state the

type of welding and positions for which the welder, welding operator, or tacker is qualified, the code and procedure under which the individual is qualified, the date qualified, and the name of the firm and person certifying the qualification tests. The certification shall be kept on file, and 3 copies shall be furnished. The certification shall be kept current for the duration of the contract.

#### 1.6.3 Renewal of Qualification

Requalification of a welder or welding operator shall be required under any of the following conditions:

a. It has been more than 6 months since the welder or welding operator has used the specific welding process for which he is qualified.

b. There is specific reason to question the welder or welding operator's ability to make welds that meet the requirements of these specifications.

c. The welder or welding operator was qualified by an employer other than those firms performing work under this contract, and a qualification test has not been taken within the past 12 months. Records showing periods of employment, name of employer where welder, or welding operator, was last employed, and the process for which qualified shall be submitted as evidence of conformance.

d. A tacker who passes the qualification test shall be considered eligible to perform tack welding indefinitely in the positions and with the processes for which he is qualified, unless there is some specific reason to question the tacker's ability. In such a case, the tacker shall be required to pass the prescribed tack welding test.

#### 1.7 INSPECTOR QUALIFICATION

Inspector qualifications shall be in accordance with AWS D1.1. Nondestructive testing personnel shall be qualified in accordance with the requirements of ASNT RP SNT-TC-1A for Levels I or II in the applicable nondestructive testing method. The inspector may be supported by assistant welding inspectors who are not qualified to ASNT RP SNT-TC-1A, and assistant inspectors may perform specific inspection functions under the supervision of the qualified inspector.

#### 1.8 SYMBOLS

Symbols shall be in accordance with AWS A2.4, unless otherwise indicated.

#### 1.9 SAFETY

Safety precautions during welding shall conform to AWS Z49.1.

### PART 2 PRODUCTS

#### 2.1 WELDING EQUIPMENT AND MATERIALS

All welding equipment, electrodes, welding wire, and fluxes shall be capable of producing satisfactory welds when used by a qualified welder or welding

operator performing qualified welding procedures. All welding equipment and materials shall comply with the applicable requirements of AWS D1.1.

### PART 3 EXECUTION

#### 3.1 WELDING OPERATIONS

##### 3.1.1 Requirements

Workmanship and techniques for welded construction shall conform to the requirements of AWS D1.1 and AISC ASD Spec. When AWS D1.1 and the AISC ASD specifications conflict, the requirements of AWS D1.1 shall govern. All backing bars shall be removed from welds prior to cleaning and painting.

##### 3.1.2 Identification

Welds shall be identified in one of the following ways:

a. Written records shall be submitted to indicate the location of welds made by each welder, welding operator, or tacker.

b. Each welder, welding operator, or tacker shall be assigned a number, letter, or symbol to identify welds made by that individual. The Contracting Officer may require welders, welding operators, and tackers to apply their symbol next to the weld by means of rubber stamp, felt-tipped marker with waterproof ink, or other methods that do not cause an indentation in the metal. For seam welds, the identification mark shall be adjacent to the weld at 3 foot intervals. Identification with die stamps or electric etchers shall not be allowed.

#### 3.2 QUALITY CONTROL

Testing shall be done by an approved inspection or testing laboratory or technical consultant; or if approved, the Contractor's inspection and testing personnel may be used instead of the commercial inspection or testing laboratory or technical consultant. The Contractor shall perform visual and radiographic, ultrasonic, and magnetic particle inspection to determine conformance with paragraph STANDARDS OF ACCEPTANCE. Procedures and techniques for inspection shall be in accordance with applicable requirements of AWS D1.1, except that in radiographic inspection only film types designated as "fine grain," or "extra fine," shall be employed.

#### 3.3 STANDARDS OF ACCEPTANCE

Dimensional tolerances for welded construction, details of welds, and quality of welds shall be in accordance with the applicable requirements of AWS D1.1 and the contract drawings. Nondestructive testing shall be by visual inspection radiographic, ultrasonic, and magnetic particle methods.

##### 3.3.1 Nondestructive Examination

The welding shall be subject to inspection and tests in the mill, shop, and field. Inspection and tests in the mill or shop will not relieve the Contractor of the responsibility to furnish weldments of satisfactory quality. When materials or workmanship do not conform to the specification requirements, the Government reserves the right to reject material or

workmanship or both at any time before final acceptance of the structure containing the weldment.

- a. One full penetration joint per gate shall be tested by the radiographic method; ultrasonic inspection may be used if radiographic is not possible. The tested joint shall be selected by the Contracting Officers Representative after all welding on the gate has been completed.
- b. 10 percent of welds on structural tee ribs shall be tested by the ultrasonic method. The tested welds shall be selected by the Contracting Officers Representative after all welding on the gate has been completed.
- c. 10 percent of fillet welds shall be tested by the magnetic particle method on each tainter gate.
- d. 100 percent of all welds shall be subject to visual inspection, in accordance with AWS D1.1 by the Certified Welding Inspector.
- e. Any weld that has questionable quality by the AWS Certified Welding Inspector shall be tested at no additional cost to the Government.

### ~~3.3.2 Destructive Tests~~

~~When metallographic specimens are removed from any part of a structure, the Contractor shall make repairs. The Contractor shall employ qualified welders or welding operators, and shall use the proper joints and welding procedures, including peening or heat treatment if required, to develop the full strength of the members and joints cut and to relieve residual stress.~~

Amend 0001

### 3.4 GOVERNMENT INSPECTION AND TESTING

In addition to the inspection and tests performed by the Contractor for quality control, the Government will perform inspection and testing for acceptance to the extent determined by the Contracting Officer. The costs of such inspection and testing will be borne by the Contractor if unsatisfactory welds are discovered, or by the Government if the welds are satisfactory. The work may be performed by the Government's own forces or under a separate contract for inspection and testing. The Government reserves the right to perform supplemental nondestructive and destructive tests to determine compliance with paragraph STANDARDS OF ACCEPTANCE.

### 3.5 CORRECTIONS AND REPAIRS

When inspection or testing indicates defects in the weld joints, the welds shall be repaired using a qualified welder or welding operator as applicable. Corrections shall be in accordance with the requirements of AWS D1.1 and the specifications. Defects shall be repaired in accordance with the approved procedures. Defects discovered between passes shall be repaired before additional weld material is deposited. Wherever a defect is removed and repair by welding is not required, the affected area shall be blended into the surrounding surface to eliminate sharp notches, crevices, or corners. After a defect is thought to have been removed, and before rewelding, the area shall be examined by suitable methods to ensure that the defect has been eliminated. Repair welds shall meet the inspection requirements for the original welds. Any indication of a defect shall be regarded as a defect, unless reevaluation by nondestructive methods or by surface conditioning shows that no unacceptable defect is present.

-- End of Section --

Amend 0001, Encl 11

SECTION 05500

SIDE SEAL ASSEMBLY AND FABRICATION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A14.3 (2002) Ladders - Fixed - Safety Requirements

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 36/A 36M (Latest Edition) Carbon Structural Steel

ASTM A 53 (Latest Edition) Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

ASTM A 276 (Latest Edition) Stainless Steel Bars and Shapes

ASTM A 480 (Latest Edition) General Requirements for Flat-Rolled Stainless and Heat Resisting Steel Plate, Sheet, and Strip

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1 (2004) Structural Welding Code - Steel

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-02 Drawings  
Miscellaneous Metal Items ; G.

Detail drawings indicating material thickness, type, grade, and class; dimensions; and construction details.

SD-04 Samples  
Gaskets and Rubber Seals ; G.

Samples of the gasket and J-bulb rubber seal shall be full size and complete as required for installation in the work, and may be installed in



the work, provided each sample is clearly identified and its location recorded.

### 1.3 GENERAL REQUIREMENTS

The Contractor shall field verify dimensions and shall make any corrective action prior to fabrication. Welding to or on structural steel shall be in accordance with AWS D1.1. Materials and parts necessary to complete each item, even though such work is not definitely shown or specified, shall be included. Poor matching of holes for fasteners shall be cause for rejection. Removal, reinstalling, and adjusting of side seal assembly shall be as indicated on the drawings and as specified in SECTION: 01540 MARINE WORK.

### 1.4 WORKMANSHIP

The material to be furnished under this section of the specifications shall be subject to inspection and test in the mill, shop, and field by Government inspectors. However, inspection in the mill or shop shall not relieve the Contractor of his responsibility to furnish satisfactory materials, and the Government reserves the right to reject any materials at any time prior to final acceptance of the completed job, when, in the opinion of the specification requirements Contracting Officer, the contract requirements have not been met. Inspection and tests by the Government will be without cost to the Contractor.

Amend 0001

## PART 2 PRODUCTS

### 2.1 SEAL ASSEMBLY

Unless otherwise specified, structural steel shall conform to ASTM A 36.

### 2.2 BOLTS, NUTS, CAP SCREWS, AND WASHERS

Bolts, nuts, screws, and washers shall be the type and material as specified below and size as indicated on the drawings. For installation, "Never Seize" or approved equal shall be used on threads to prevent galling. Bolts, unless otherwise specified, shall be American National form of thread. Where corrosion-resisting steel (stainless steel) bolts, nuts, and screws, and washers are required, material shall conform to ASTM A 276.

#### 2.2.1 FLAT HEAD CAP SCREWS AND BOLTS

Flat head cap screws and bolts shall conform to ASTM A 276, type 304, condition A.

#### 2.2.2 HEXAGON HEAD BOLTS

Hexagon head bolts shall conform to ASTM A 276, type 304.

#### 2.2.3 HEXAGON NUTS

Hexagon nuts shall conform to Nitronic 60, UNS-S21800. The hexagon nuts shall have nylon locking inserts.

#### 2.2.4 WASHERS

Tainter gate side seal plate washers shall be 2" outside diameter and shall conform to ASTM A 480, Type 304, circular style. (These will require special fabrication.)

### 2.3 SHIMS

Shims shall be steel, conforming to ASTM A 611, Grade A.

### 2.4 RUBBER WASHERS AND GASKETS

Rubber washers and gaskets shall conform to ASTM D 2000, BC 610 Z1, (Z1 - Ultimate Elongation 250% Min.). The gaskets shall have the following characteristics: A durometer hardness of 55-65, minimum tensile strength of 1,000 p.s.i, neoprene base, weather resistant and ozone resistant. Rubber washers (1/16" thick) shall be provided behind each 2" O.D. washer.

### 2.5 ANGLES AND BARS

Angles and bars shall be fabricated from a single piece of structural steel conforming to ASTM A 36.

#### 2.5.1 RUBBER GATE SEALS

Rubber seals shall be molded rubber only. The material shall be compounded of natural or synthetic polyisoprene ~~or~~ or a blend of both and shall contain reinforcing carbon black, zinc oxide, accelerators, antioxidants, vulcanizing agents and plasticizers. Physical characteristics shall meet the following requirements.

Amend 0001

<u>PHYSICAL TEST</u>	<u>TEST VALUE</u>	<u>TEST METHOD SPECIFICATION</u>
Tensile Strength	2,500 psi (min.)	ASTM D 412
Elongation at Break	450% (min.)	ASTM D 412
300% Modulus	900 psi (min.)	ASTM D 412
Durometer Hardness (Shore Type A)	60 to 70	ASTM D 2240
*Water Absorption	5% by weight (max.)	ASTM D 471
Compression Set	30% (max.)	ASTM D 395
Tensile Strength (after aging 48 hrs)	80% of tensile strength (min.)	ASTM D 572

\* The "Water Absorption" test shall be performed with distilled water. The washed specimen shall be blotted dry with filter paper or other absorbent material and suspended by means of small glass rods in the oven at a temperature of 70 degrees plus/minus 2 degrees C for 22 plus/minus ¼ hour. The specimen shall be removed, allowed to cool to room temperature in air, and weighed. The weight shall be recorded to the nearest 1 mg as W1 (W1 is defined in ASTM D 471). The immersion temperature shall be 70 degrees plus/minus 1 degree C and the duration of immersion shall be 166 hours.

## PART 3 EXECUTION

### 3.1 GENERAL REQUIREMENTS

The side seal assembly shall be fabricated in accordance with details indicated on the drawings. The fabrications shall be in accordance with requirements for tolerance, clearances and finished specifically mentions in these specifications or on the drawings. Tolerances, clearances and dimensions not specifically mentioned shall be according to standard practice, due consideration being given to the special nature or functions of the parts and to the corresponding accuracy required. The bars and angles shall be formed to the proper curvature by cold working without reducing the elastic limit of the material and this shall be done in the fabrication shop. The gate seal clamping bars shall have edges ground smooth. Torch cutting the boltholes will not be allowed. Slots shall be punched.

### 3.2 WORKMANSHIP

Finished members shall be in accordance with the details shown on the drawings and as specified. Corners shall be square and true unless otherwise specified or shown on the drawings. All burrs from fabrication shall be lightly ground smooth prior to assembly or painting.

#### 3.2.1 DIMENSIONAL TOLERANCES

Dimensions shall be measured by means of an approved calibrated steel tape of the same temperature as the steel. The following tolerances apply to the side seal angles and bars and shall be determined, after bending to the proper radius, with J-bulb leg of the curved angle laying on a flat surface which has an arc drawn to the proper radius. The inside face of the skin plate leg of the angle and side seal bars shall be within 0-inch and +1/2-inch of the proper radius. The outside face of the J-bulb leg shall not deviate more than 1/4-inch from the flat surface. The legs of the curved angle shall be within +1/8-inch of forming a true 90 degree angle when measured at the edge of the skin plate leg. The radius bends shall be smooth with no abrupt changes. Submit a sample gasket and J-bulb seal for review and approval.

#### 3.2.2 VERIFICATION OF TOLERANCES

The Contractor shall mark each side seal angle and bar with an identification number and record the tolerance measurements of each angle and bar along with radius and length in an acceptable format. The Contractor shall furnish the records of measurements to the Contracting Officer; three or more of the angles and bars will be randomly chosen by the Contracting Officer; and the Contractor shall check the measurements in the presence of the Contracting Officer to verify the dimensional tolerances prior to shipping.

-- End Of Section --